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BOSTON, MA 02109

EXAMINER

BETIT, JACOB F

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/988,853
Filing Date: November 19, 2001
Appellant(s): TELOH ET AL.

David R. Burns
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 26 September 2005 appealing from the Office action
mailed 29 June 2004.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,629,264 B1	Sicola et al.	09-2003
6,324,654 B1	Wahl et al.	11-2001
6,209,002 B1	Gagne	03-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6-10, 12-16, 18, 20-23, 25-29, 31-35, 37-41, 43-46, and 48-50 are rejected under 35 U.S.C. 102(e) as being anticipated by Sicola et al. (U.S. patent No. 6,629,264).

As to claim 1, Sicola et al. teaches in a storage network (see column 7, lines 1-11), a method for replicating data in the storage network (see column 1, lines 5-10), the method comprising the steps of:

identifying to a first data replication facility at a first programmable electronic device in the storage network a first structure and a second structure held by a storage device locally accessible to the first programmable electronic device (see abstract, where “storage device” is

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read on “data storage array”, and an array holds two or more storage structures);

instructing the first data replication facility to logically group the first structure and the second structure from the storage device to create a group (see column 20, lines 38-55, where “group” is read on “set”);

generating a replica of the group at the first data replication facility (see column 8, line 52 through column 9, line 7); and

forwarding the replica in accordance with a communication protocol from the first data replication facility at the first programmable electronic device to a second data replication facility at a second programmable electronic device in the storage network for storage by a second storage device (see column 6, lines 1-13, and see column 9, lines 1-5).

As to claim 8, Sicola et al. teaches a method for replicating data (see column 1, lines 6-10) in a storage network to update one or more data structures of a remote storage device (see column 6, line 66 through column 7, line 12), the method comprising the steps of:

instructing a first data replication facility of a first electronic device in the storage network to logically associate a first data structure and a second data structure held by a locally accessible storage device, wherein the logical association defines a group (see abstract and column 20, lines 38-55, where “storage device” is read on “data storage array, an array holds two or more storage structures, and “group” is read on “set”);

generating a replica of the first data structure and the second data structure as the group (see column 8, line 52 through column 9, line 7); and

outputting the replica in accordance with a data communications protocol from the first

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replication facility of the first electronic device to a second replication facility of a second electronic device in the storage network to update the one or more data structures of the remote storage device (see column 6, lines 1-13, and see column 9, lines 1-5).

As to claim 13, Sicola et al. teaches a readable medium holding programmable electronic device readable instructions (see column 9, lines 10-34, where “programmable electronic device readable instructions” is read on “software” and it is well known in the art that software is stored on a readable medium) for executing a method for replicating data in a storage network (see column 1, lines 5-10), the method comprising the steps of:

identifying to a first data replication facility at a first programmable electronic device in the storage network a first structure and a second structure held by a storage device locally accessible to the first programmable electronic device (see abstract, where “storage device” is read on “data storage array”, and an array holds two or more storage structures);

instructing the first data replication facility to group the first structure and the second structure from the storage device (see column 20, lines 38-55, where “group” is read on “set”);

generating a replica of the first structure and the second structure as a group at the first data replication facility (see column 8, line 52 through column 9, line 7); and

asserting the replica in accordance with a communication protocol from the first data replication facility at the first programmable electronic device to a second data replication facility at a second programmable electronic device in the storage network for storage by a second storage device locally accessible to the second programmable electronic device (see column 6, lines 1-13, and see column 9, lines 1-5).

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As to claims 2 and 14, Sicola et al. teaches further comprising the step of, forwarding from the first data replication facility at the first Programmable electronic device to the second data replication facility at the second programmable electronic device information identifying a storage location at the second storage device at which to store the replica (see column 20, lines 41-44).

As to claims 3 and 15, Sicola et al. teaches wherein the first programmable electronic device forwards the replica to the second programmable electronic device in a synchronous manner (see column 11, line 27 through column 12, line 3).

As to claims 4 and 16, Sicola et al. teaches wherein the first programmable electronic device forwards the replica to the second programmable electronic device in an asynchronous manner (see column 12, line 6 through column 13, line 41).

As to claims 6, 12, and 18, Sicola et al. teaches wherein the first programmable electronic device and the second programmable electronic device in the storage network operate without a volume manager facility (There is no mention of a “volume manager facility” in the disclosed specification of Sicola et al., therefore, it is assumed that Sicola et al. do not use a “volume manager facility”).

As to claims 7 and 20, Sicola et al. teaches wherein the first structure comprises a first

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logical volume and the second structure comprises a second logical volume (see column 3, lines 18-26).

As to claim 9, Sicola et al. teaches further comprising the steps of, packaging with the replica, information identifying one or more storage locations for storage of the replica on the remote storage device (see column 20, lines 41-44).

As to claim 10, Sicola et al. teaches further comprising the steps of, instructing the first data replication facility to preserve a write ordering of the first data structure and the second data structure in the group (see column 12, lines 49-50).

As to claim 21, Sicola et al. teaches, in a storage network (see column 7, lines 1-11), a method to create a replica of selected data in the storage network (see column 1, lines 5-10), the method comprising the steps of:

instructing a first data replication facility at a first electronic device in the storage network to track changes to one or more storage locations of a first storage medium that correspond to the selected data (see column 12, lines 17-34);

instructing the first data replication facility to generate the replica of the selected data based on the tracked changes to the one or more locations of the first storage medium (see column 12, lines 47-59);

placing the replica of the selected data in a data structure (see column 12, lines 50-52);
and

forwarding the replica of the selected data in accordance with a communication protocol from the data structure to a second data replication facility at a second electronic device in the storage network for storage of the replica on a second storage medium by the second electronic device (see column 12, lines 47-50).

As to claim 33, Sicola et al. teaches, a readable medium holding programmable electronic device readable instructions (see column 9, lines 10-34, where “programmable electronic device readable instructions” is read on “software” and it is well known in the art that software is stored on a readable medium) for executing a method to create a replica of selected data in a storage network (see column 1, lines 5-10), the method comprising the steps of:

instructing a first data replication facility at a first programmable electronic device in the network to track changes to one or more areas of a first storage device in communication with the first programmable electronic device, wherein the one or more areas correspond to the selected data (see column 12, lines 17-34);

instructing the first data replication facility to generate the replica of the selected data based on the tracked changes to the one or more areas of the first storage device (see column 12, lines 47-59);

placing the replica of the selected data in a data structure (see column 12, lines 50-52);
and

forwarding the replica of the selected data in accordance with a communication protocol from the data structure to a second data replication facility at a second programmable electronic device in the storage network for storage of the replica on a second storage device in

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communication with the second programmable electronic device (see column 12, lines 47-50).

As to claims 22 and 34, Sicola et al. teaches further comprising the step of, sending an instruction from the first data replication facility at the first electronic device to the second data replication facility at the second electronic device to initiate a process for receiving and storing the replica of the selected data (see column 9, lines 21-34, where it is inherent that the PPRC manager must send an instruction to the second device in order to initiate the connection and heartbeat with the remote controller).

As to claims 23 and 35, Sicola et al. teaches further comprising the step of, halting the generation of the replica of the selected data until the replica held by the data structure is forwarded from the data structure to the second data replication facility at the second electronic device in the storage network (see column 14, line 33 through column 15, line 58).

As to claims 25 and 37, Sicola et al. teaches further comprising the step of, identifying to the first data replication facility at the first electronic device in the storage network the selected data held by the first storage medium in communication with the first electronic device (see column 20, lines 38-55).

As to claims 26 and 38, Sicola et al. teaches wherein the data structure comprises a queue (see column 14, lines 45-58, where “queue” is read on “log”).

As to claims 27 and 39, Sicola et al. teaches wherein the first electronic device performs the forwarding of the replica of the selected data from the data structure to the second data replication facility at the second electronic device in a first in first out (FIFO) manner (see column 14, lines 59-65, where “FIFO” is read on “in order”).

As to claims 28 and 40, Sicola et al. teaches wherein the first electronic device performs the forwarding of the replica of the selected data from the data structure to the second data replication facility at the second electronic device in a synchronous manner (see column 11, line 27 through column 12, 3).

As to claims 29 and 41, Sicola et al. teaches wherein the first electronic device performs the forwarding of the replica of the related data from the data structure to the second data replication facility of the second electronic device in an asynchronous manner (see column 12, line 5 through column 13, line 41).

As to claims 31 and 43, Sicola et al. teaches wherein the first electronic device and the second electronic device operate without a volume manager facility (There is no mention of a “volume manager facility” in the disclosed specification of Sicola et al., therefore, it is assumed that Sicola et al. do not use a “volume manager facility”).

As to claims 32 and 44, Sicola et al. teaches wherein the one or more locations of the first storage medium comprise one of a track, a sector, a logical volume and a logical offset into the

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first storage medium (see column 19, line 58 through column 20, line 4).

As to claim 45, Sicola et al. teaches a method for replicating data (see column 1, lines 6-10) in a distributed network to update a remote storage device with data from a local storage device (see column 6, line 66 through column 7, line 12), the method comprising the steps of:

instructing a first data replication facility of a first electronic device in the distributed network to track one or more locations of a local storage device that correspond to one or more identified volumes (see column 12, lines 17-34);

grouping each of the one or more identified volumes into a group by the first data replication facility (see column 20, lines 38-55, where “group” is read on “set”);

generating a replica of the group at the first data replication facility (see column 12, lines 47-59); and

asserting the replica in accordance with a communication protocol toward a second replication facility of a second electronic device in the distributed network to update the remote storage device (see column 12, lines 47-50).

As to claim 46, Sicola et al. teaches further comprising the step of, sending a command from the first data replication facility to the second data replication facility of the second electronic device to initiate receipt of the replica (see column 9, lines 21-34, where it is inherent that the PPRC manager must send a command to the second device in order to initiate the connection and heartbeat with the remote controller).

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As to claims 48, Sicola et al. teaches further comprising the step of, sending from the second data replication facility to the first data replication facility an indication that the update to the remote storage device completed (see column 11, lines 60-63).

As to claim 49, Sicola et al. teaches further comprising the step of, writing the replica to a local queue for temporary storage before the asserting of the replica in accordance with the communication protocol toward the second replication facility of the second computer occurs (see column 12, lines 18-34).

As to claim 50, Sicola et al. teaches further comprising the step of, identifying to the first data replication facility of the first electronic device in the distributed network the one or more volumes of the data for the replicating of data to update the remote storage device (see column 20, lines 38-55).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 11, 17, 19, 30, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sicola et al. (U.S. patent No. 6,629,264 B1) in view of Wahl et al. (U.S. patent No. 6,324,654 B1).

As to claims 5, 11, and 17 Sicola et al. does not teach wherein the communication protocol comprises the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol suite.

Wahl et al. teaches a computer network remote data mirroring system that writes update data both to a local data device and to a remote system (see abstract) in which he teaches wherein the communication protocol comprises the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol suite (see column 5, lines 14-38).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sicola et al. to include wherein the communication protocol comprises the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol suite.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sicola et al. by the teachings of Wahl et al. because wherein the communication protocol comprises the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol suite would allow the transfer of data for the data replication system to go over common networks such as LANs, the Internet, and other WANs.

As to claim 19, Sicola et al. does not teach wherein the first structure comprises a first group of records and second structure comprises a second group of records.

Wahl et al. teaches wherein the first structure comprises a first group of records and second structure comprises a second group of records (see abstract and column 12, lines 38, where it is understood in the art that a database contains a plurality of records, and if it is spread across several disks each disk with contain a group of the database records).

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Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sicola et al. to include wherein the first, structure comprises a first group of records and second structure comprises a second group of records.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sicola et al. by the teachings of Wahl et al. because wherein the first, structure comprises a first group of records and second structure comprises a second group of records would ensure chronological coherency to be maintained on the mirror devices (see Wahl et al., column 12, lines 15-28).

As to claims 30 and 42, Sicola et al. does not teach wherein the communication protocol comprises the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol suite.

Wahl et al. teaches wherein the communication protocol comprises the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol suite (see column 5, lines 14-38).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sicola et al. to include wherein the communication protocol comprises the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol suite.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sicola et al. by the teachings of Wahl et al. because wherein the communication protocol comprises the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol suite would allow the transfer of data for the data replication system to go over common networks such as LANs, the Internet, and other WANs.

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Claims 24, 36, 47, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sicola et al. (U.S. patent No. 6,629,264 B1) in view of Gagne et al. (U.S. patent No. 6,209,002 B1).

As to claims 24 and 36, Sicola et al. does not teach further comprising the step of, packaging with the replica of the selected data information that identifies a storage location for storage of the replica of the selected data on the second storage medium.

Gagne et al. teaches a data storage facility that mirrors data onto at least three different remote sites (see abstract) in which he teaches further comprising the step of, packaging with the replica of the selected data information that identifies a storage location for storage of the replica of the selected data on the second storage medium (see column 8, lines 22-52).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sicola et al. to include further comprising the step of, packaging with the replica of the selected data information that identifies a storage location for storage of the replica of the selected data on the second storage medium.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sicola et al. by the teachings of Gagne et al. because further comprising the step of, packaging with the replica of the selected data information that identifies a storage location for storage of the replica of the selected data on the second storage medium would enable the copy program to transfer data to the appropriate destination (see Gagne et al., column 8, lines 30-32).

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As to claim 47, Sicola et al. does not teach further comprising the step of, packaging with the replica information that indicates a storage location for each volume in the replica for storage on the remote storage device.

Gagne et al. teaches further comprising the step of, packaging with the replica information that indicates a storage location for each volume in the replica for storage on the remote storage device (see column 8, lines 22-52).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sicola et al. to include further comprising the step of, packaging with the replica information that indicates a storage location for each volume in the replica for storage on the remote storage device.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sicola et al. by the teachings of Gagne et al. because further comprising the step of, packaging with the replica information that indicates a storage location for each volume in the replica for storage on the remote storage device would (see column 8, lines 22-52).

As to claim 51, Sicola et al. as modified, teaches wherein the information comprises one of a volume name and a volume number (see Sicola et al., column 12, lines 37-55).

(10) Response to Argument

A. Rejection of claims 1-4, 6-10, 12-16, 18, 20-23, 25-29, 31-35, 37-41, 43-46, and 48-50 under 35 U.S.C. §102(e)

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Appellant makes arguments traversing the rejection of the independent claims as a group. Appellant appears to only have one general argument against the rejection of the independent claims and that is that all of the independent claims “require the element of logically grouping two elements held by a storage device ... into a group”, which Appellant alleges is not taught by Sicola et al. The examiner submits that independent claims 21 and 33 make no mention of grouping any kind. Therefore, the features upon which Appellant’s arguments rely are not recited in the rejected claims 21 and 33. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The only features of claims 21 and 33 that resemble any combining or grouping of any sort recite “instructing a first data replication facility ... to track changes to one or more storage locations of a first storage medium that correspond to said selected data”, in claim 21 and “instructing a first data replication facility ... to track changes to one or more areas of a first storage device ... wherein the one or more areas correspond to said selected data”, in claim 33. The examiner contends these limitations are not the same as logically grouping structures, elements, volumes, or even data and actually hold a much broader meaning. One reasonable interpretation of these limitations only requires instructing the first facility to track changes to ONE storage location (or area) of a first storage medium (or device). In this case it is not even possible to form a group, let alone the fact that no grouping step is being claimed. Certainly no requirement of grouping exactly two elements is made in this claim as is argued by Appellant.

For the reasons given above and the lack of protest toward any other part of the rejection of claims 21 and 33 or their dependents, the examiner submits that at least the rejection of these

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claims and their dependents was proper. Appellant, by not making any other arguments, appears to concede to remaining parts of the examiner's rejection.

In response to Appellant's arguments that "Sicola fails to disclose this step of grouping two elements held by a storage device into a group", the arguments were fully considered but were not deemed persuasive. Sicola et al. recites "logical unit members S1 through Sn (where 'n' can be any number [in this case 2]) of an association set 'S' are established by a system user" (see column 20, lines 41-43).

This organizing of logical units (elements) makes it so that all of the writes made to the local system or systems (not the backup systems, see figure 2, reference number 218) happen in the same order to the remote system or systems (backup systems, see figure 2, reference number 219). Because of this, if a write is made to S2 and then later made to S1 (both part of figure 2, reference number 203) when the remote copy is made to Sn (or the remote copy set of S1 and the remote copy set of S2, both part of figure 2, reference number 213) the write to this "remote copy set" is made in the same order as it was made locally (i.e. write to S2 and then S1). More benefits of grouping two logical units (that are not mirrors of each other and therefore not the same as remote copy sets), are listed at column 19, line 58 through column 20, line 4.

Appellant's arguments are often directed toward the fact that "an associate set consists of pairs of volumes" and alleges that these volumes have to exist on different sites. The examiner traverses this notion. In making this argument Appellant refers to column 19, lines 58-60, which read, "An association set is a group of logical units (a set of one [or] more remote copy sets) on a local or remote pair of array controllers". This statement seems to be misinterpreted by

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Appellant. Appellant appears to reason that an association set is nothing more than a larger remote copy set. However, when looking at this statement one can conclude that Sicola et al. envisioned grouping a plurality local volumes that are already paired up in remote copy sets. So that when backups were made from these local volumes they would go in order to the corresponding members of the remote copy set. Sicola et al. defines a remote copy set as “a pair of same-sized volumes, one on the local array, and one on the remote array” that are both written two every time there is a write to the local volume (see column 8, lines 51-63). Unlike a remote copy set an association set is a group of one or more logical units (same as volumes, see column 8, line 53) that do not have the same data. Members of an association set share different properties such as a log so that “writes during a ‘mini-merge’ operation (a merge following write history logging) and asynchronous micro-merge writes are replayed in the same order received from the host”.

Appellant argues “a remote copy set contains data that are physically in two arrays, a local array and a remote array, that reside on two different storage device[s]”. In Appellant’s arguments it is insinuated that the examiner refers to the “remote copy set” of Sicola et al. to teach the feature of “instructing a first data replication facility to logically group said first structure data structure, and said second structure from said storage device to create a group”. The examiner makes note of the fact that neither in the rejection to the claims nor in any response to arguments did the examiner refer to “remote copy sets” when showing that Sicola et al. taught the claimed limitation of “instructing the first data replication facility to logically group the first structure and the second structure from the storage device to create a group” or

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any of the similar limitations in independent claims 8, 13, or 45. This rejection of this limitation refers to column 20 lines 38-55 which is discussing "association sets" and how they are created.

Appellant later argues that the "association sets" cannot be used to teach the limitations in question because "Sicola defines an association set as a group of logical units (i.e. a set of one or more remote copy sets) on a local or remote pair of array controllers with attributes for logging and failover selectable by a system user". The examiner notes that a remote copy set is not the same as a logical unit because a remote copy set includes "volumes (or LUNs [logical units, see column 8, line 64]) on a local array as being paired with counterpart volumes on a remote array" (see column 8, lines 53-55). Sicola et al. is saying "a set of one or more remote copy sets" because these logical units that are being grouped now were previously grouped with the other member of their "remote copy set". That is, the logical unit members S1 through Sn of the association set are also each a member of their own remote copy set and are paired with logical unit members S1' through Sn' on a remote site. This makes it so that writes going to the members of the association set will also go in the same order to the corresponding members of their remote copy sets.

A remote copy set is created for the sole purpose of deciding where the backup copy of a particular logical unit should be sent (see column 8, line 50 through column 9, line 7). An association set is created so that changes to two or more local logical units will be consistent when they are "played back" to the remote copy sets (see column 3, lines 50-53). Therefore while in a remote copy set both logical units are copies of each other, in an association set the logical units are not copies but logical units that have writes that are synchronized with each other. "[T]he present invention provides a mechanism of associating a set of volumes to

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synchronize the logging to the set of volumes so that [] the log is consistent when it is 'played back' to the remote site" (column 3, lines 50-53). "[A]ssociation sets are employed by the present invention to provide failure consistency by causing the group of logical units/volumes to all fail at the same time, ensuring a point in time consistency on the remote site" (column 3, lines 24-27).

B. Rejection of claims 5, 11, 17, 19, 30 and 42 under 35 U.S.C. §103(a)

Appellant's arguments directed towards the rejection of claims 5, 11, 17, 19, 30, and 45 reiterate deficiencies Appellant feels were made in the rejection of the independent claims, and do not address any new points. Therefore the examiner submits that if the rejection of the independent claims is deemed proper, the rejection of claims 5, 11, 17, 19, 30, and 45 should also be upheld.

C. Rejection of claims 24, 36, 47, and 51 under 35 U.S.C. §103(a)

Appellant's arguments directed towards the rejection of claims 24, 36, 47, and 51 reiterate deficiencies Appellant feels were made in the rejection of the independent claims, and do not address any new points. Therefore the examiner submits that if the rejection of the independent claims is deemed proper, the rejection of claims 24, 36, 47, and 51 should also be upheld.

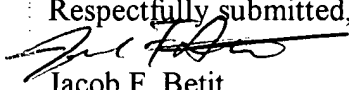
(11) Related Proceeding(s) Appendix

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No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Jacob F. Betit

Examiner

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Conferees:



Charles Rones

Supervisory Patent Examiner

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Safet Metjahic

Supervisory Patent Examiner

Art Unit 2161



Sam Rimell

Primary Examiner

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An appeal conference was held on 06 December 2005, and it was agreed to proceed to the board of appeals.